I: Hocart Y-5 (ca. 1920) 1929 OQ6 Lau OQ6
Lakemba

desirable, for sluggish water becomes hot and wilts the plants. The irrigation consists in dipping water from the stream with coconut shells attached to a stick, or flooding the fields by turning the course of the stream.

Formerly there were two kinds of taro fields: those cultivated by the *mbiti* method and those by the *lauvoro*. The *mbiti* method is now discontinued because it involves too much time and labor. It was described to me as follows:

> In a *mbiti* the grass is cut, fired, and the rubbish removed so that the soil appears; the body of the soil (*yango ni nggele*) is dug thoroughly; then conical holes are made with a special digging stick, which has a head like that of a javelin reed or an European gun shell; some of the heads were as thick as the post of a house. The pits thus made were as deep as four feet. The patches were encased in earth walls surrounded by ditches. Taro raised by this method grew as high as six feet, with tubers eighteen inches long.

By the *lauvoro* method the grass is cut and the taro planted in the midst of the rubbish; the holes being made with a pole (*i pasa*) (Pl. II, *A*) which broadens at its lower end, narrowing to a point; the blade is flat on one side and slightly convex on the other, making small conical holes.

Both cuttings and suckers are planted. In planting cuttings, the top of the root is removed with the stem, the leaves removed also. There is no special season for planting taro, although certain times seem to be more productive than others. For instance, taro maturing in November and December, when it is most needed because of yam stortage during these months, has an unpleasant flavor and develops an abundance of suckers. Occasional weeding is necessary until maturity, when it becomes harmful. In the days of the late Tui Naiau, huge taro fields still extended from the back of Tumbou to the foot of Kendekende; now only the upper part is properly cultivated, the work being done mostly in the evening.

Sugar Cane Growing

Sugar cane is planted in clumps here and there, in the villages or in the fields, merely for use in puddings. A charm is used to drive away the *kitu*, a small bird which eats the sugar-cane and plantains. The owner of the charm rubs certain leaves in his hands and points to a distant spot. The birds then fly to the place indicated.

Sugar cane, *nggai* (*Dracaena terminalis*), supplies a thick juicy root which is cooked in hot stones for three days, producing a substance which tastes like licorice. Such ovens are not often made as they are large and require that the stones be heated all night.

1: Hocart Y-5 (ca. 1920) 1929 OQ6 Lau OQ6
Lakemba

Greens

The leaves of various plants are collected by women for use as vegetables (*mboro*). There is the "true" *mboro* and a species of fern called *ota*. The Chilean pepper, cabbage, and cress have been adopted.

Kava Growing

Ava plants for the making of kava are propagated by slips; the lower joints with a bud on each are planted. Sometimes they are raised over a flat stone so that the mass of the root grows upwards; the plant then holds on to the ground only by rootlets, which spread over and round the stone.

Coconuts

The coconut tree affords a great many articles of everyday use: the root is used for dye; the stem for beams and rafters; the leaves for baskets, fans, and walls; the spathe for a torch; the reticula for sacks and strainers; the husk for coir; the shell for water bottles and cups; the flesh and kernel of the nut are good for men, pigs, and fowls.

A special name is given to each stage of the growing nut: *mataloa, sosou, mbu, kande, niu mandu* (mature nut), *vara* (sprouting nut). Special terms are also used in counting nuts.

When the owner wishes to cut copra, he reserves his coconut trees by setting up some mark, called *lele*, which usually includes portions of coconut leaves. These are merely signs and do not cause disease.

Planting Periods

The months are called moons, and are lunar months. It is impossible at the present day to get a complete Lauan calendar, as the European system has displaced the old style of reckoning time. Yam planting determines the names of most months. The month of reeds is the one in which yams are dug up. Some months or series of months are vaguely designated as "digging months" or "months of maturity" (*vula i matua*). Some months are called after the fish that are caught at that season: thus about November comes the "great *palolo*," then the "little *palolo*," then the "great *nungga*," and the "little *nungga*": months when the yams are maturing, so there is no planting.

First Fruits

The word *sevu* has a wide meaning. It may perhaps be best rendered by the verb "to handsel," meaning "to begin a thing ceremonially." It applies chiefly however to the offering of first fruits from plantations.

2: Thompson E-5 (1933-1934)1940 OQ6 Lau OQ6
Kambara

to plant it was a waste of time and soil. Most people today plant the shoots without testing them by this method. 245

Bananas are harvested by men only. Usually the bunches are picked and hung from beams in the house to ripen. If wrapped in tapa to exclude light they turn yellow quickly. Sometimes a bunch is tied to a stick resting across the mouth of a hole in the ground so that the bunch hangs in the hole; then the hole is covered. The bananas ripen quickly without the skins turning yellow. 245 252

Nothing is done to fight the several banana pests. Young banana shoots are killed by a black beetle (*Cosmopolites sordidus*) which eats its way into the heart. Bats, especially the flying fox, eat bananas and many birds attack them. 245 136

Papaya

Papaya (*lewetchi, Carica papaya*) trees are found on all the islands of Lau. Wherever there is a chance clearing in the bush there are papaya trees, seeded by birds; but the fruit is small through lack of sun or exposure to wind. Papaya seeds are strewn carelessly. As the sprouts come to the surface a few stones are placed around them for protection. Within three months a tree is 2 to 3 meters high. The fruit is best during the first and second year. The main crop is ripe about November, December, and January, but papayas are eaten throughout the year. The fruit which weighs up to six pounds is picked off the tree with a stick. Papaya is not valued highly by the natives.

NON-FOOD PLANTS

Pandanus

Pandanus grows well on Kambara, and especially well on Wangava. On Fulanga it is good and plentiful. The leaves have a special softness, do not break when dry, and make fine smooth mats. Namuka has little pandanus. 249

Pandanus grows best in the shade and in damp soil. Usually it is found as an underbrush in coconut groves. Occasionally one sees a patch in the bush. It is planted by men or women, preferably during the rainy season. A crown shoot about 0.5 meter long is cut out of a plant and part of it is shoved into a hole dug in the ground. The first leaves are cut after one year of growth, but they are too weak and small to make good mats. The leaves are best in the third and fourth years of growth. They are cut in the dry months, about 5 or 6 cm. from the trunk. A plant that has grown so high that the leaves cannot be cut while the cutter is standing on the ground is bent.

2: Thompson E-5 (1933-1934)1940 OQ6 Lau OQ6
Kambara

Paper mulberry

248 The paper mulberry (*masi*) is found on all the islands of Lau. *Masi ntchina* is the most common variety and the best for making barkcloth. It is cultivated extensively in the gardens of Namuka. On the other islands it usually is found in moist, damp places near the village, the trees scattered, not planted in rows as on Namuka. Ongea, Fulanga, and Kambara have grown the paper mulberry only for the last 10 years. Old people say that it grew on Kambara a long time ago, but died out, and that 10 years ago plants were imported from the island of Totoya.

The paper mulberry is planted by men only, preferably during the dry season. Women cut down the trees when they have reached a diameter of about 6 cm. and make barkcloth from the inner bark.

Tobacco

249 276 [177] Since tobacco was introduced into Lau in historic times, the demand for it has been great and constant. However, though it will grow on all the islands, little tobacco is planted. Namuka produces more than any other island of the southern group.

The tobacco seed is planted by men only. When the plants are about 7 cm. high they are transplanted and laid out in rows about a meter apart. The leaves are cut by men, but women hang them up to dry. They tie the leaves together in pairs and hang them over a cord in the house, for they must not dry in the sun.

Tobacco is smoked by both sexes. Usually the leaves are rolled into a dry banana leaf and smoked like a cigarette.

Fragrant plants

249 303 Several plants are cultivated for perfuming coconut oil. *Makosoi (Canangium odoratum)* is a small shrub which usually grows on the sandy flat behind the village near the limestone cliff. It is planted at any time by either men or women. Women pick the flowers and extract the oil from them.

Langakali (Elacocharis articulata) is a shrub which grows wild in the bush but which is planted in the villages by women. The wild plants bloom from March to July but the cultivated ones bloom all year round. The flowers are used for perfume.

[757] *Makita (Parinarium glaberrimum)* is cultivated on Mothe and Kambara by men and women. The fruit is used for perfuming oil, for dyeing the hair, and for medicine. The natives claim it cures sores on the skin.

Sandalwood (*yasi*) is the favorite perfume. The tree does not grow well and the bark is not very fragrant in southern Lau. The women plant a few trees by seed, but the best sandalwood comes from Mbua on Vanau Mbalavu.

13 25. MANGO is a moderately large limestone and volcanic island, 8 miles south of Kanathea, 20 miles W.N.W. of Tuvutha', and 17 miles N.N.E. of Thithia. (S.17° 27', 179° 09' W.). It is surrounded by a fringing reef, about 1/2 mile wide. On the north there is a wide gap in the reef, forming an excellent anchorage with the prevailing S. to E. winds. The island is nearly circular, 3 miles in diamtere, and reaches an elevation (Mt.Rider) on the south of 730 feet according to the owner (the Pilot Book, H.O.166, p.372, gives 670 feet). Two other high volcanic hills overlook the west coast, and there is one nearly as high in the north ridge.

This marginal ring of hills, partly volcanic and partly of upraised coral limestone, encloses a broad central basin which is at present 245 thickly planted to cocomut palms. It was formally used for the [248] cultivation of sugar cane, and prior to that for raising cotton. The ● [249] old sugar mill still stands near the owners houses, toward the center 361 of the basin. From it a small tram line runs to the N.E.bay. 491

The island is owned by Mr. James Borron, and is managed by his son. 423 There is no native population other than the workmen employed on the 464 plantation, which are mostly Indians. It is one of the most productive 162 and luxurient islands in Lau, and would be well worth an extended 13 biological survey. There is a dense forest among the limestone hills on the N.E., hanging with tropical vines, and with lianas up to 15 inches in diameter. The volcanic hills are covered with the usual grass and scrub, and here and there are groves of Casuarina trees. A small lake, in the N.W.gap, supports a flock of wild ducks, and other bird life is abundant.

312 Water is abundant. A large stream drains the central basin, flowing N.E. to the nearly enclosed bay. There are also several small lakes and pools of fresh water.

245 At present about 500 tons of copra are produced annually. A herd

13 26. KANATHEA is a circular island of volcanic material, 2 to 2 1/2 miles in diameter, lying 7 miles west of Vanua Mbalavu and 8 miles north of Mango. (S.17° 15', 179° 10' W.) It is surrounded by a fringing reef, and from the east side a loop of barrier reef extends about 6 miles to the N.E., enclosing a spacious lagoon. On the north [504] side there is an indentation in the shore reef within which small craft may anchor within a few hundred feet of a small wharf. The island is undulating and hilly, with several peaks of fair height, the highest (830') overlooking the N.W.shore. On the north-east rises a hill, on the S.E. side of which is a conspicuous thumb-like shaft of volcanic rock. The hills in several places rise in sheer cliffs of this material.

[312] Water is abundant, the interior being drained by several streams.

[245] The valley bottoms and more gradual slopes are thickly planted with coconut palms. The summits of the hills are partly wooded.

423 The island is privately owned and over 600 tons of copra are pro-
245 duced anmually. 700 head of cattle are pastured and flocks of ~~????~~
233 turkeys roam the hills. In former times cotton and later sugar cane
136 were successfully grown. There is no native population, all the workmen
248 being Indians.
249
162 As bird life is carefully protected, insects are somewhat reduced in numbers. A strict quarentine is also maintained against weeds.

13

[p.66]